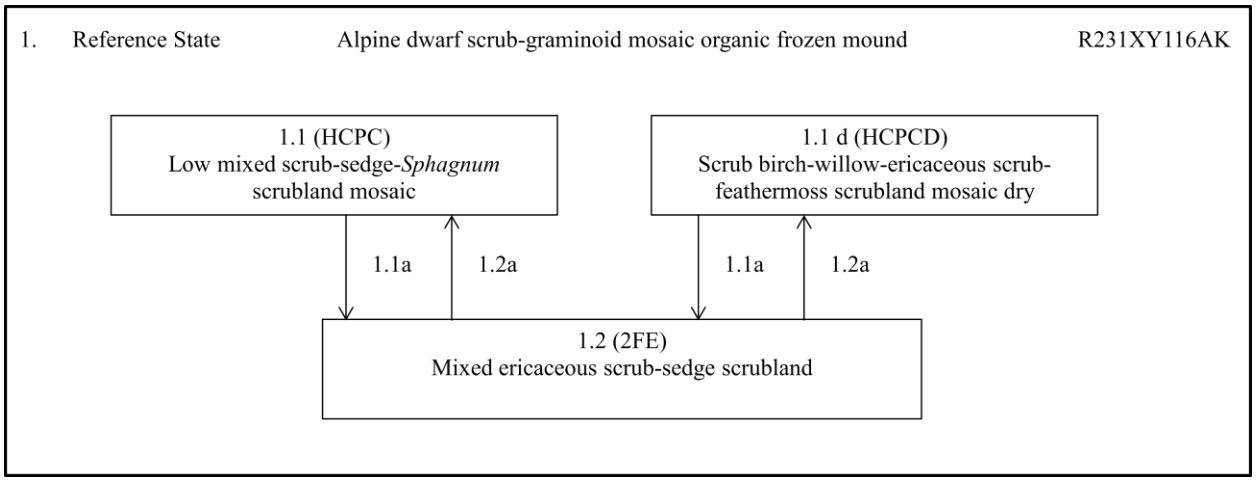
Ecological Site Description ID:	R231XY116AK

Ecological Dynamics of the Site:

This alpine ecological site generally occurred on steeper backslopes of mountains (i.e. > 10% slopes). In this ecological site, cryoturbation resulted in patterned ground features known as solifluction lobes. For community phase 1.1, soils were classified as fibristels and were composed of organic matter over loamy cryoturbate. Lobes were at times distinct and other times indistinct. When distinct, lobes were identified by scalloped terrain. This report discusses the two plant communities observed in association with solifluction lobes, which occur separately on what we term interlobes and lobe fronts. Lobe fronts (community 1.1 d) were considered the steep faces on the downhill side of the solifluction lobe, while interlobes (community 1.1) were the large relatively smooth area between lobe fronts. Fire resulted in one additional community phase.

State and Transition Diagram:



State ID Number:	1	State Name:	Reference

State Narrative:	For the climax phase, interlobe vegetation was predominately a mixture of low shrubs and graminoids and lobe fronts were a mixture of medium shrubs and mosses. Medium shrubs are defined to grow 3 to 10’ in height, low shrubs grow 8” to 3’ in height, and dwarf shrubs grow less than 8” in height. The gentle slope associated with the interlobe limited drainage and supported moister soils when compared to lobe fronts.

Photo 1.1	

Community Phase Number:	1.1	Community Phase Name:	Low mixed scrub-sedge-*Sphagnum* scrubland mosaic

Community Phase Narrative:
Shrub and graminoid cover were abundant components of vegetation (i.e. often > 50% cover). Shrubs grew primarily in the low and dwarf stratums. Common low shrubs were *Ledum palustre* and *Salix pulchra*, while common dwarf shrubs were *Betula nana*, *Vaccinium vitis-idaea*, and *Empetrum nigrum*. The bulk of graminoid cover was sedges and common species were *Carex bigelowii* and *Eriophorum vaginatum*. *Sphagnum species* were an abundant ground cover.

Community Pathways	
Pathway Number	Pathway Name & Description
1.1A	Fire.

Photo 1.1d	

Community Phase Number:	1.1 d	Community Phase Name:	Scrub birch-willow-ericaceous scrub-feathermoss scrubland mosaic dry

Community Phase Narrative:
Shrubs cover was an abundant component of vegetation (i.e. >100% cover) and occurred in the medium, low, and dwarf stratums. A common medium shrub was *Betula glandulosa,* common low shrubs were *Salix pulchra* and *Vaccinium uliginosum*, and common dwarf shrubs were *Ledum palustre* and *Rubus chamaemorus*. Graminoid cover was nearly half that observed in interlobe communities and was a mixture of grass and sedge species such as *Calamagrostis canadensis* and *Carex bigelowii*. Forbs and lichen were minor component of the vegetative community. Feathermoss species, such as *Hylocomium splendens and Pleurozium schreberi,* were an abundant component of ground cover.

Community Pathways	
Pathway Number	Pathway Name & Description
1.1a	Fire. It was unclear if the fire regimes differed between community 1.1 and 1.1d.

Photo 1.2	

Community Phase Number:	1.2	Community Phase Name:	Mixed ericaceous scrub-sedge scrubland

Community Phase Narrative:
When comparing the early fire phase to the unburned interspace community discussed earlier (community 1.1), vegetation was similar but lacked dwarf scrub and *Sphagnum* moss cover. When comparing this phase to the unburned lobe front community discussed earlier (community 1.1 d), overall scrub and feathermoss cover were reduced. Three field observations were made for this community phase.

Community Pathways	
Pathway Number	Pathway Name & Description
1.2a	Time without fire and normal growth.